

REMARKS**I. General**

The issues outstanding in the instant application are as follows:

- Claims 2 and 12 are objected to for informalities;
- Claims 8, 9, 26 and 27 stand rejected under 35 U.S.C. 112, second paragraph;
- Claims 1, 2, 4, 12, 13, 18, 20, 23 and 28 stand rejected under 35 U.S.C. 102(e) as anticipated by Carlson, U.S. Pat. No. 3,674,082 (hereinafter *Carlson*);
- Claims 3, 19 and 24 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Carlson* in view of Ubowski et al., U.S. Pat. No. 6,346,692 (hereinafter *Ubowski*);
- Claims 5, 6, 21 and 22 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Carlson* in view of Blair et al., U.S. Pat. Pub. No. 2002/0173271 (hereinafter *Blair*);
- Claims 7, 14 and 25 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Carlson* in view of Petranovich et al., U.S. Pat. No. 5,946,624 (hereinafter *Petranovich*);
- Claims 10, 11 and 29 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Carlson* in view of Hiramatsu et al., U.S. Pat. No. 6,463,261 (hereinafter *Hiramatsu*); and
- Claims 8, 9, 16, 17, 26 and 27 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Carlson*, in view of *Petranovich*, and further in view of *Blair*.

Applicant hereby traverses the outstanding rejections of the claims, and request reconsideration and withdrawal of the outstanding rejections in light of the amendments and remarks contained herein. Claims 8, 9, 12 and 26 are amended above to, at least in part, correct typographical errors. These amendments to the claims have only been made for cosmetic purposes, resolving minor typographical errors, and not for a substantial reason related to patentability. New claims 30-35 have been added. Support for these new claims

can be found at least at page 9, lines 13-20, of the specification. Therefore, no new matter has been added by these amendments. Claims 1 and 3-35 are currently pending in this application.

II. Objections to the Claims

Claims 2 and 12 are objected to for informalities. As the Office Action points out claim 2 restates a limitation present in claim 1 and depends therefrom. Therefore, Applicant has canceled claim 2 above. The Office Action also states that “the word ‘the’ before the word ‘periodicity’ is not needed.” Without conceding the objection, Application has amended claim 12 to delete the word “the” before the word “periodicity” in line 4 of claim 12.

III. Rejections under 35 U.S.C. §112, second paragraph

Claims 8, 9, 26 and 27 stand rejected under 35 U.S.C. 112, second paragraph as being indefinite. The Office Action states that there is insufficient antecedent basis for the limitation “said time sequence shifting” in claims 8 and 9. Claims 8 and 9 have been amended above to replace the inadvertently included limitation “time sequence shifting” from claims 8 and 9 and replaced it with “skipping at least one time slot” a limitation taken directly from base claim 7.

The Office Action also states that there is insufficient antecedent basis for the limitation “said time slots” in claims 26 and 27. The Office Action goes on to suggest that “claim 26 should depend on claim 25 rather than claim 2.” Applicant has amended claim 26 to reflect that it is, in fact, intended to depend from claim 25 by replacing the occurrence of the number “2” in claim 26, with the number “25,” correcting this typographical error.

Claims 8, 9 and 26 have been amended to correct typographical errors and only for the purpose of complying with the requirements of 35 U.S.C. § 112, second paragraph, and not for the purpose of narrowing their scope. No new matter has been entered. As each element of indefiniteness cited by the Office Action has been addressed with a corresponding amendment, Applicant respectfully requests the rejections of claims 8, 9, 26 and 27 under 35 U.S.C. §112, second paragraph, be withdrawn.

IV. Rejection(s) under 35 U.S.C. §102(e)

Claims 1, 2, 4, 12, 13, 18, 20, 23 and 28 stand rejected under 35 U.S.C. 102(e) as anticipated by *Carlson*.

Independent claim 1 has been amended to clarify that the RF data transfers scheduled to avoid interference are carried out during the RF data transfer intervals. Basis for this limitation already existed in the claims, and also exists at least in FIGURES 3 and 4 and their descriptions in the specification on pages 10 and 11. Therefore, no new matter has been added by this amendment.

Independent claim 1, as amended, recites “means for detecting repetitive RF interference which occurs during RF data transfer intervals” and “means, ... for scheduling said RF data transfer during said intervals that avoid said interference.” Applicant respectfully contends that *Carlson* does not disclose these limitations. *Carlson* provides that transmissions are time to coincide with quiescent periods of the noise, see column 2, lines 30-31. *Carlson* clearly indicates, by employing the sync clock signal described beginning on line 62 of column 3, that it restarts transmission during the quiescent periods rather than continuing to transferring RF data during intervals that avoid interference.

Applicant respectfully points out that, in order for a prior art reference to be anticipatory under 35 U.S.C. § 102 with respect to a claim, “[t]he identical invention must be shown in as complete detail as is contained in the . . . claim,” see M.P.E.P. § 2131, citing *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913 (Fed. Cir. 1989). Applicant respectfully asserts that *Carlson* fails to satisfy this requirement with respect to claim 1, particularly as amended. Therefore, Applicant respectfully asserts that for the above reason independent claim 1, particularly as amended, is patentable over the 35 U.S.C. § 102 rejection of record. Furthermore, there are great differences between claim 1 and the prior art of record, and a person of ordinary skill in the art considering the prior art would not find these differences obvious.

Claim 4 depends directly from independent claim 1, and thus inherits all limitations of claim 1. Thus, claim 4 sets forth features and limitations not recited by *Carlson*. Therefore, Applicant respectfully asserts that at least for the reasons advanced above in addressing the

anticipation rejection of claim 1, claim 4 is also patentable over the 35 U.S.C. § 102 rejection of record.

Independent claim 12 has been amended to include limitations of original claim 13. Claim 12, as amended, recites “detecting interference using a filter” and “sweeping said filter across an RF band of interest.” *Carlson*, in the portion of its specification cited by the Office Action, only teaches that the Received Signal Strength Indicator signal or a demodulated AM signal received from the receiver is used by the noise detect circuit. Therefore Applicant respectfully contends that *Carlson* fails to teach at least “sweeping said filter across said band of interest,” as recited by claim 12, as amended. Hence, Applicant respectfully asserts that at least for this reason independent claim 12, as amended, is patentable over the 35 U.S.C. §102 rejection of record. Furthermore, there are great differences between independent claim 12 and the prior art of record, and a person of ordinary skill in the art considering the prior art would not find these differences obvious.

Claims 13 and 18 depend from independent claim 12, and thus inherits all limitations of claim 12. Thus, claims 13 and 18 set forth features and limitations not recited by *Carlson*. Therefore, Applicant respectfully asserts that at least for the reasons advanced above in addressing the anticipation rejection of claim 12, claims 13 and 18 are also patentable over the 35 U.S.C. § 102 rejection of record.

Independent claim 20 has been amended above to indicate that “said RF filter is separate from a receiver and a transmitter, and said at least one antenna is separate from antennas, used to carry out said RF data transmissions.” Basis for this limitation exists at least in FIGURE 1 and in its description beginning in the specification on page 8, line 18.

The Office Action, when addressing claim 10, admits that *Carlson* does not teach “using a separate antenna for interference detection.” This limitation will be dealt with below in greater detail when addressing the obviousness rejection of claim 10, where Applicant points out that *Hiramatsu* fails to teach or suggest using a separate antenna for interference detection.

Regardless, *Carlson* does not teach or suggest that the RF filter used to determine time periods of repetitive RF interference within an RF band of interest to arrive at an

interference profile of periodicity and duration of the interference is separate from a receiver and a transmitter used to carry out said RF data transmissions. In FIGURE 2 of *Carlson*, the microwave noise detect circuit is clearly shown as a part of transceiver 12 and as described beginning on line 23 of column 3, employ's outputs of the receiver. Thus, *Carlson* fails to teach or suggest that the "RF filter is separate from a receiver and a transmitter, and said at least one antenna is separate from antennas, used to carry out said RF data transmissions."

It is well settled that to anticipate a claim, the reference must teach every element of the claim, see M.P.E.P. §2131. Moreover, in order for a prior art reference to be anticipatory under 35 U.S.C. § 102 with respect to a claim, "[t]he elements must be arranged as required by the claim," see M.P.E.P. § 2131, citing *In re Bond*, 15 US.P.Q.2d 1566 (Fed. Cir. 1990). Therefore, Applicant respectfully asserts that for the above reasons independent claim 20, as amended, is patentable over the 35 U.S.C. §102 rejection of record. Furthermore, there are great differences between independent claim 20 and the prior art of record, and a person of ordinary skill in the art considering the prior art would not find these differences obvious.

Claims 23 and 28 depend directly from independent claim 20 and thus each inherits all limitations of claim 20. Therefore, each of claims 23 and 28 set forth features and limitations not recited by *Carlson*. Thus, Applicant respectfully asserts that for at least the reasons advanced above in addressing the anticipation rejection of claim 20 claims 23 and 28 are patentable over the 35 U.S.C. §102 rejection of record.

Rejections under 35 U.S.C. §103(a)

As noted above, claims 3, 19 and 24 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Carlson* in view of *Ubowski*; claims 5, 6, 21 and 22 stand rejected as unpatentable over *Carlson* in view of *Blair*; claims 7, 14 and 25 stand rejected as unpatentable over *Carlson* in view of *Petranovich*; claims 10, 11 and 29 stand rejected as unpatentable over *Carlson* in view of *Hiramatsu*; and claims 8, 9, 16, 17, 26 and 27 stand rejected as unpatentable over *Carlson*, in view of *Petranovich* and *Blair*. Applicant respectfully traverses these rejections.

A Prima Facie case of obviousness has not been established.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art cited must teach or suggest all the claim limitations. See M.P.E.P. §2143. Without conceding the second criteria, Applicant asserts that the rejection does not satisfy the first and/or third criteria, with respect to various ones of the claims.

The recited combination does not teach or suggest all claimed limitations.

Claims 3, 19 and 24 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Carlson* in view of *Ubowski*. The Office Action admits that *Carlson* fails to teach “periodic noise in the ISM band resulting from radar signals.” To address this deficiency the Office Action introduces *Ubowski*, which the Office Action alleges to teach “a microwave oven which adaptively avoids interference with a communications device” and “how microwave energy has uses in radar applications.”

Claim 3 depends from independent claim 1 and claim 24 depends from independent claim 20. As noted above, in addressing the anticipation rejections of claims 1 and 20, each of claims 1 and 20, as amended recite limitations that *Carlson* fails to teach or suggest. The Office Action does not rely on *Ubowski* as teaching these limitations. Whereas claim 3 inherits all limitations of claim 1 and claim 24 inherits all limitations of claim 20, the combination of references does not teach all elements of the claimed invention of claims 3 or 24.

Regardless, applicant respectfully contends, despite the allegations of the Office Action that *Ubowski* fails to teach or suggest interference from a radar signal. *Ubowski* only teaches that microwave energy is useful for among other things for radar. Therefore, *Ubowski* fails to teach radar as interference.

Claims 5, 6, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Carlson* in view of *Blair*. In addressing claims 5 and 21 the Office Action admits that *Carlson* fails to teach “changing of a modulation of the RF data transfer to accommodate the

time sequence adjustment.” To address this deficiency the Office Action introduces *Blair*, which the Office Action alleges to teach “changing of a modulation scheme.” Regarding claims 6 and 22, the Office Action admits that *Carlson* fails to teach “adjusting of a code rate of the RF data transfer to accommodate the time sequence adjustment.” The Office Action also alleges that *Blair* teaches “the changing of a symbol rate.”

Claims 5 and 6 depend from independent claim 1 and claims 21 and 22 depend from independent claim 20. As noted above, in addressing the anticipation rejections of claims 1 and 20, each of claims 1 and 20, as amended recite limitations that *Carlson* fails to teach or suggest. The Office Action does not rely on *Blair* as teaching these limitations. Whereas claims 5 and 6 inherit all limitations of claim 1 and claims 21 and 22 inherit all limitations of claim 20, the combination of references does not teach all elements of the claimed invention of claims 5, 6, 21 or 22.

Regardless, Applicant respectfully contends, despite the allegations of the Office Action, that *Blair* fails to teach or suggest modulation of an RF data transfer changed to accommodate time sequence shifting, particularly where the time sequence shifting is carried out to avoid interference. Further, Applicant respectfully contends, despite the allegations of the Office Action, that *Blair* fails to teach or suggest adjusting a code rate of an RF data transfer to accommodate time sequence shifting carried out to avoid interference. In paragraph 47, *Blair* teaches that the modulation and symbol rate are selected based on bandwidth, which is selected based on priority of the data. Therefore, applicant respectfully contends that *Blair* fails to teach or suggest changing a modulation or adjusting a code rate of an RF data transfer to accommodate time sequence shifting.

Claims 7, 14, 15, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Carlson* in view of *Petranovich*. Regarding claims 7, 14, and 25, the Office Action admits that *Carlson* fails to teach “skipping or eliminating time slots in a sequence of time slots.” In an attempt to address this deficiency the Office Action introduces *Petranovich*, which the Office Action alleges to teach “a method of reducing interference in Figure 6 where cells A-G use frequencies F₁ - F₇ during time slot T, and then skip time slot T', and use frequencies in time slot T2.” Regarding claim 15, the Office Action further alleges that *Carlson* teaches that “the desired RF transmissions are scheduled during the quiescent periods (duration) in the noise.”

Claim 7 depends from independent claim 1, claims 14 and 15 depend from independent claim 12, and claim 25 depends from independent claim 20. As noted above, in addressing the anticipation rejections of claims 1, 12 and 20, each of claims 1, 12 and 20, as amended, recite limitations that *Carlson* fails to teach or suggest. The Office Action does not rely on *Petranovich* as teaching these limitations. Whereas claim 7 inherits all limitations of claim 1, claims 14 and 15 inherit all limitations of claim 12, and claim 25 inherits all limitations of claim 20, the combination of references does not teach all elements of the claimed invention of claims 7, 14, 15 or 25.

Regardless, claim 7 recites “skipping at least one time slot in a sequence of time slots of said data transfer to avoid said interference,” and claims 14 and 15 recite “eliminating at least one of said time slots for the duration of said interference” (emphasis added). In FIGURE 6, *Petranovich* clearly shows “time sharing of the limited frequencies available” (column 5, lines 21 and 22). *Petranovich* does not show skipping a time slot, the time slots of *Petranovich* are just used by different customers. Therefore, *Petranovich* clearly does not show eliminating a time slot, and in fact, might be seen as teaching away from eliminating a time slot, in that all time slots in *Petranovich* are used by somebody.

Claims 10, 11, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Carlson* in view of *Hiramatsu*. In addressing claim 10, the Office Action admits that *Carlson* fails to teach “using a separate antenna for interference detection.” In an attempt to address this deficiency the Office Action introduces *Hiramatsu*, which the Office Action alleges to teach “a system in Figure 2 that uses an antenna 1 for reception and detection of an interference signal.” Regarding claims 11 and 29, the Office Action admits that *Carlson* fails to teach “the antennas used for data transfer are sectorized and are used to determine a direction of the interference.” The Office Action relies on *Hiramatsu* as teaching “a system in Figure 2 that detects interference from an undesired source (direction of interference) as well as desired information as shown in Figure 2.”

Claims 10 and 11 depend from independent claim 1 and claim 29 depends from independent claim 20. As noted above, in addressing the anticipation rejections of claims 1 and 20, each of claims 1 and 20, as amended, recite limitations that *Carlson* fails to teach or suggest. The Office Action does not rely on *Hiramatsu* as teaching these limitations.

Whereas claims 10 and 11 inherit all limitations of claim 1 and claim 29 inherits all limitations of claim 20, the combination of references does not teach all elements of the claimed invention of claims 10, 11 or 29.

Regardless, contrary to the contentions of the Office Action, *Hiramatsu* fails to teach or suggest “an antenna separate from antennas used to effect said RF data transfer,” as recited by claim 10. *Hiramatsu*, at column 4, lines 10-12 states “a signal of the interference mobile station and a signal of the desired mobile station are received from the reception antenna 1.” Therefore, *Hiramatsu* not only fails to teach or suggest, but teaches away from “an antenna separate from antennas used to effect said RF data transfer,” as recited by claim 10.

Hiramatsu also fails to teach or suggest “antennas used to effect said RF data transfer are sectorized and are used to determine a direction of said interference,” as recited in claims 11 and 29. *Hiramatsu* only describes detecting the interfering mobile station’s timing (see column 4, lines 12-14), and is silent as to determining a direction of interference. Further *Hiramatsu* is silent as to whether antenna 1 is sectorized.

Claims 8, 9, 16, 17, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Carlson* in view of *Petranovich*, as applied to claims 7, 14, 15, and 25, and further in view of *Blair*.

First, Applicant wishes to point out that claims 8 and 9 depend from independent claim 1, claims 16 and 17 depend from independent claim 12, and claims 26 and 27 depend from independent claim 20. As noted above, in addressing the anticipation rejections of claims 1, 12 and 20, each of claims 1, 12 and 20, as amended, recite limitations that *Carlson* fails to teach or suggest. The Office Action does not rely on *Petranovich* or *Blair* as teaching these limitations. Whereas claims 8 and 9 inherit all limitations of claim 1, claims 16 and 17 inherit all limitations of claim 12 and claims 26 and 27 inherit all limitations of claim 20, the combination of references does not teach all elements of the claimed invention of claims 8, 9, 16, 17, 26 or 27.

Furthermore, claims 8 and 9 depend from claim 7, claims 16 and 17 depend from claim 15, and claims 26 (as amended) and 27 depend from claim 25. As noted above, in addressing the obviousness rejections of claims 7, 15 and 25, each of claims 7, 15 and 25,

recite limitations that the combination of *Carlson* and *Petranovich* fails to teach or suggest. The Office Action does not rely on *Blair* as teaching these limitations. Whereas claims 8 and 9 inherit all limitations of claim 7, claims 16 and 17 inherit all limitations of claim 15 and claims 26 and 27 inherit all limitations of claim 25, the combination of references does not teach all elements of the claimed invention of claims 8, 9, 16, 17, 26 or 27.

In addressing claims 8, 16, and 26 the Office Action admits that the combination of *Carlson* and *Petranovich* fails to teach “changing of a modulation of the RF data transfer.” In addressing claims 9, 17, and 27 the Office Action also admits that the combination of *Carlson* and *Petranovich* fails to teach “changing of code rate of the RF data transfer.”

However, similar to as discussed above in addressing the obviousness rejections of claims 5, 6, 21, and 22, *Blair* fails to teach or suggest modulation of an RF data transfer changed to accommodate skipping at least one time slot, as recited by claim 8, as amended, particularly where the skipping of a time slot is carried out to avoid interference. Similarly, *Blair* fails to teach or suggest changing a modulation of an RF data transfer to accommodate data in remaining ones of the time slots, as recited in claims 16 and 26, particularly where slots have been eliminated to avoid interference.

Further, similar to as also discussed above in addressing the obviousness rejections of claims 5, 6, 21, and 22, Applicant respectfully contends that *Blair* fails to teach or suggest adjusting a code rate of an RF data transfer to accommodate skipping at least one time slot, as recited by claim 9, as amended, particularly where the skipping of a time slot is carried out to avoid interference. Similarly *Blair* fails to teach or suggest adjusting a code rate of an RF data transfer to accommodate remaining ones of the time slots, as recited in claims 17 and 27, particularly where slots have been eliminated to avoid interference.

As noted above, *Blair*, in paragraph 47, teaches selection of modulation and symbol rate based on bandwidth, which is selected based on priority of the data. Therefore, applicant respectfully contends that *Blair* fails to teach or suggest changing a modulation or adjusting a code rate of an RF data transfer to accommodate skipped or eliminated time slots.

For at least the foregoing reasons, Applicant respectfully asserts that claims 3, 5-11, 14-17, 19, 21, 22, 24-27 and 29 are patentable over the 35 U.S.C. § 103(a) rejection of record.

New claims 30-35, 32 and 33 each recite a limitation speaking to determining the most efficient of scheduling RF data transfer during intervals that avoid interference and allowing forward error correction of a receiver to correct errors in RF data transfers, or the like. Applicant respectfully submits that *Carlson* nor any of the secondary references of record teach or suggest such a limitation. Furthermore, new claims 31, 33 and 35 each recite “efficiency is based on one or more of payload, customer payload, and data payload.” Applicant also respectfully contends that this limitation is also absent from nor suggested by *Carlson* or any of the secondary references of record.

Regardless, new claims 30-35 depend directly from respective ones of independent claims 1, 12 or 20, and thus inherit all limitations of their respective base independent claims 1, 12 or 20. Therefore, for at least the reasons advanced above in addressing the anticipation rejections of claims 1, 12 and 20, each of new claims 30-35 set forth features and limitations not recited by the various combinations of *Carlson* and the other references of record. Thus, Applicant respectfully asserts that new claims 30-35 should be indicated as being allowable over the art of record.

The Office Action does not provide the requisite motivation.

As noted above, in rejecting claims 3, 5-11, 14-17, 19, 21, 22, 24-27 and 29 the Office Action admits that *Carlson* fails to teach various limitations appearing in some of the dependent claims. The Office Action attempts to cure these deficiencies by introducing various references, or a combination of references.

It is well settled that the fact that references can be combined or modified is not sufficient to establish a prima facie case of obviousness, M.P.E.P. §2143.01. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ.2d 1430 (Fed. Cir. 1990), as cited in M.P.E.P. §2143.01.

The motivation for making the combination of *Carlson* and *Ubowski* to reach claims 3, 19 and 24 was presented as follows:

it would have been obvious to someone of ordinary skill in the art given these references to modify the teachings of Carlson to avoid radar interference rather than interference from microwave ovens in order to provide an improved means of communication in environments with periodic noise sources other than microwave ovens as spoken of in column 2, lines 1-19 of Carlson.

Whereas neither the *Carlson* reference nor the *Ubowski* reference teach avoiding radar interference, Applicant respectfully asserts that the above motivation provided by the Office Action is merely a statement that the references can be combined, does not state any desirability for combining the references and ignores the teaching of the references. For example, *Ubowski* does not characterize radar as an interference, but rather as a beneficial use of microwaves.

The motivation for making the combination of *Carlson* and *Blair* to reach claims 5, and 21 was presented as follows:

it would have been obvious to someone of ordinary skill given these references to combine the teachings of Carlson with the modulation scheme adjustment of Blair et al. in order to provide a more preferable modulation scheme for outgoing data as spoken of on page 5, paragraph 46 of the Blair et al. reference.

The motivation for making the combination of *Carlson* and *Blair* to reach claims 6 and 22 was presented as follows:

it would have been obvious to someone of ordinary skill given these references to combine the teachings of Carlson with the symbol rate adjustment of Blair et al. in order to provide a more preferable symbol rate for outgoing data as spoken of on page 5, paragraph 46 of the Blair et al. reference.

As noted above *Blair* teaches that the modulation and symbol rate are selected based on bandwidth, which is selected based on priority of the data. Therefore, Applicant respectfully contends that nothing in *Blair* would suggest motivation for modifying *Carlson* to change or adjust a modulation or code rate of an RF data transfer, particularly to accommodate time sequence shifting, absent the application of impermissible hindsight, as *Blair* only teaches selection of a modulation or symbol rate based on bandwidth.

The motivation for making the combination of *Carlson* and *Petranovich* to reach claims 7, 14 and 25 was presented as follows:

it would have been obvious to someone of ordinary skill in the art given these references to combine the teachings of Carlson with the time slot skipping of Petranovich et al. in order to reduce co-channel interference as spoken of in column 5, lines 11-36 of the Petranovich et al. reference.

Co-channel interference is only avoided in *Petranovich* due to time sharing of a frequency by different users. Therefore the motivation provided by the Office Action in misleading in that *Petranovich* does not teach skipping any time slots. Further the motivation provided by the Office Action does not present any reason why it is desirable to modify *Carlson* to skip time slots as *Petranovich* does not skip any time slots. Therefore, Applicant respectfully asserts that the above motivation provided by the Office Action is merely a statement that the references can be combined, does not state any desirability for combining the references, and ignores the teaching of the references. Further as noted above, *Petranovich* might be seen as teaching away from eliminating a time slot, in that all time slots in *Petranovich* are used by somebody. Therefore, the motivation provided by the Office Action to combine *Carlson* and *Petranovich* is improper, at least as to claims 14 and 25. (See M.P.E.P. §2145.)

The motivation for making the combination of *Carlson* and *Hiramatsu* to reach claim 10 was presented as follows:

it would have been obvious to someone of ordinary skill in the art given these references to combine the teachings of Carlson with the multiple antenna teachings of Hiramatsu et al. in order to eliminate interference in the system as spoken of column 3, lines 51-63.

As noted above, *Hiramatsu* not only fails to teach or suggest, but teaches away from “an antenna separate from antennas used to effect said RF data transfer,” as recited by claim 10. Therefore, the motivation provided by the Office Action to combine *Carlson* and *Hiramatsu* is improper, see M.P.E.P. §2145.

The motivation for making the combination of *Carlson* and *Hiramatsu* to reach claims 11 and 29 was presented as follows:

it would have been obvious to someone of ordinary skill in the art given these references to combine the teachings of Carlson with the interference detection teachings of Hiramatsu et al. in order to eliminate interference in the system as spoken of column 3, lines 51-63.

Whereas, as noted above, *Hiramatsu* also fails to teach or suggest “antennas used to effect said RF data transfer are sectorized and are used to determine a direction of said interference,” as recited in claims 11 and 29 and *Hiramatsu* is silent as to determining a direction of interference and whether antenna 1 is sectorized. Applicant respectfully contends that the motivation provided by the Office Action in addressing claims 11 and 29 is merely a statement that the references can be combined, does not state any desirability for combining the references and ignores the teaching of the references.

The motivation for adding *Blair* to the combination of *Carlson* and *Petranovich*, to reach claims 8, 16, and 26, was presented as follows:

it would have been obvious to someone of ordinary skill given these references to combine the teachings of Carlson in view of Petranovich et al. with the modulation scheme adjustment of Blair et al. in order to provide a more preferable modulation scheme for outgoing data as spoken of on page 5, paragraph 46 of the Blair et al. reference.

The motivation adding *Blair* to the combination of *Carlson* and *Petranovich*, to reach claims 9, 17, and 27, was presented as follows:

it would have been obvious to someone of ordinary skill given these references to combine the teachings of Carlson in view of Petranovich et al. with the symbol rate adjustment of Blair et al. in order to provide a more preferable symbol rate for outgoing data as spoken of on page 5, paragraph 46 of the Blair et al. reference.

Applicant respectfully reiterates the above recited failures of the motivation for combining *Carlson* and *Petranovich*, and the above recited failure failures of the motivation for combining *Carlson* and *Blair*, especially the above noted teaching of *Blair* that a modulation or symbol rate is selected based only on bandwidth. In light of the above discussions, Applicant respectfully contends that nothing in *Blair* would suggest motivation for modifying *Carlson*, much less *Carlson* in view of *Petranovich*, to change or adjust a modulation or code rate of an RF data transfer, particularly to accommodate time sequence shifting, absent the application of impermissible hindsight.

For the foregoing reasons, Applicant respectfully contends that the various motivations provided by the Examiner for combining *Carlson* and various other references of record are improper, as the motivation to combine references must establish the desirability for making the combination. No valid suggestion has been made as to why a combination of *Carlson* and the respective ones of the cited references is desirable. Therefore, the rejection of claims 3, 5-11, 14-17, 19, 21, 22, 24-27 and 29 should be withdrawn.

V. Conclusion

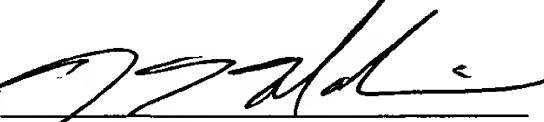
In view of the above amendments and for all the reasons given above, Applicant submits that the pending claims, as amended, distinguish over the prior art under 35 U.S.C. §§102 and 103 and meets the requirements of 35 U.S.C. §112. Accordingly, Applicant submits that this application is in full condition for allowance.

The required added claim fees for this response are enclosed. If any additional fee is due, please charge Deposit Account No. 06-2380, under Order No. 60783/P001US/10102072 from which the undersigned is authorized to draw.

Applicant respectfully requests that the Examiner call the below listed attorney if the Examiner believes that the attorney can be helpful in resolving any remaining issues or can otherwise be helpful in expediting prosecution of the present application.

Dated: January 31, 2005

Respectfully submitted,

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